AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel without prejudice claims 17-24.

LISTING OF CLAIMS:

Claim 1 (original): An aortic catheter for cerebral and coronary embolic protection comprising:

an elongated catheter shaft having at least one perfusion lumen extending therethrough;

a deployable aortic flow divider mounted to the catheter shaft; the aortic flow divider having an upper surface and a lower surface; and

at least one flow-through orifice through the aortic flow divider from the upper surface to the lower surface.

Claim 2 (original): The aortic catheter of claim 1, wherein the aortic flow divider comprises an inflatable member.

Claim 3 (original): The aortic catheter of claim 2, wherein the catheter shaft comprises an inflation lumen in fluid communication with the inflatable member.

Claim 4 (original): The aortic catheter of claim 1, wherein at least one flow-through orifice comprises two flow-through orifices through an upstream end of the aortic flow divider.

Claim 5 (original): The aortic catheter of claim 4, wherein the flow-through orifices have a diameter of approximately 0.010 to 0.0250 inches.

Claim 6 (original): The aortic catheter of claim 4, wherein the flow-through orifices have a diameter of approximately 0.050. to 0.0100 inches.

Claim 7 (original): The aortic catheter of claim 1, wherein the catheter shaft comprises one perfusion lumen extending from a proximal end of the catheter shaft to at least one arch perfusion port and at least one corporeal perfusion port.

Claim 8 (original): The aortic catheter of claim 7, wherein the at least one arch perfusion port discharges above the upper surface of the aortic flow divider and the at least one corporeal perfusion port discharges below the lower surface of the aortic flow divider.

Claim 9 (original): The aortic catheter of claim 7, wherein the at least one arch perfusion port and the at least one corporeal perfusion port are configured to provide a fluid flow ratio in the rage of approximately 1:2 to approximately 1:4.

Claim 10 (original): The aortic catheter of claim 1, wherein the catheter shaft comprises an arch perfusion lumen extending from a proximal end of the catheter shaft to at least one arch perfusion port and a corporeal perfusion lumen extending from the proximal end of the catheter shaft to at least one corporeal perfusion port.

Claim 11 (original): The aortic catheter of claim 10, wherein the at least one arch perfusion port discharges above the upper surface of the aortic flow divider and the at least one corporeal perfusion port discharges below the lower surface of the aortic flow divider.

Claim 12 (original): The aortic catheter of claim 1, wherein the aortic flow divider is configured to partition the lumen of the aortic arch longitudinally into a first fluid flow channel in fluid communication with the aortic arch vessels and a second fluid flow channel in fluid communication with the patient's corporeal circulation.

Claim 13 (original): The aortic catheter of claim 1, wherein the aortic flow divider is configured to divert emboli downstream to the patient's corporeal circulation.

Claim 14 (original): The aortic catheter of claim 1, wherein the elongated shaft is sized and configured to be inserted directly into the aorta through an aortotomy incision.

Claim 15 (original): The aortic catheter of claim 1, wherein the elongated shaft is sized and configured to be inserted into the aorta through a peripheral artery insertion site.

Claim 16 (original): The aortic catheter of claim 1, wherein at least a portion of the elongated shaft is reinforced with a wire coil.

Claim 17 (cancelled):

Claim 18 (cancelled):

Claim 19 (cancelled):

Claim 20 (cancelled):

Claim 21 (cancelled):

Claim 22 (cancelled):

Claim 23 (cancelled):

Claim 24 (cancelled):